

Department of Energy

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height above grade that includes sleeping accommodations where the occupants are primarily permanent in nature (30 days or more).

New Federal building means any building to be constructed by, or for the use of, any Federal agency which is not legally subject to State or local building codes or similar requirements. A new building is a building constructed on a site that previously did not have a building or a complete replacement of an existing building from the foundation up.

Proposed building means the building design of a new Federal low-rise residential building proposed for construction.

[71 FR 70283, Dec. 4, 2006, as amended at 72 FR 72571, Dec. 21, 2007]

§ 435.3 Material incorporated by reference.

(a) *General.* DOE incorporates by reference the energy performance standard listed in paragraph (b) of this section into 10 CFR Part 435 subpart A. The Director of the Federal Register has approved the material listed in paragraph (b) of this section for incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. Any subsequent amendment to this material by the standard-setting organization will not affect the DOE building energy performance standard unless and until DOE amends its building energy performance standards. DOE incorporates the material as it exists on the date specified in the approval and a notice of any change in the material will be published in the FEDERAL REGISTER.

(b) *List of standards incorporated by reference.* *ICC International Energy Conservation Code (IECC), 2004 Supplement Edition*, January 2005, International Code Council, ISBN 7801S04.

(c) *Availability of references.* The building energy performance standard incorporated by reference is available for inspection at:

(1) National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to:
http://www.archives.gov/federal_register/

[code_of_federal_regulations/ibr_locations.html](#)

(2) U.S. Department of Energy, Forrestal Building, Room 1M-048 (Resource Room of the Federal Energy Management Program), 1000 Independence Avenue, SW., Washington, DC 20585-0121, (202) 586-9138, between 9 a.m. and 4 p.m., Monday through Friday, except Federal holidays.

(d) *Obtaining copies of standards.* The building energy performance standard incorporated by reference may be obtained from the following source: the International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478-5795, <http://www.iccsafe.org/category.html>

§ 435.4 Energy efficiency performance standard.

(a) All Federal agencies shall design new Federal low-rise residential buildings, for which design for construction began on or after January 3, 2007, to:

(1) Meet *ICC International Energy Conservation Code, 2004 Supplement Edition*, January 2005 (incorporated by reference, see § 435.3), and

(2) If life-cycle cost-effective, achieve energy consumption levels, calculated consistent with paragraph (b) of this section, that are at least 30 percent below the levels of the baseline building.

(b) Energy consumption for the purposes of calculating the 30 percent savings shall include space heating, space cooling, and domestic water heating.

(c) If a 30 percent reduction is not life-cycle cost-effective, the design of the proposed building shall be modified so as to achieve an energy consumption level at or better than the maximum level of energy efficiency that is life-cycle cost-effective, but at a minimum complies with paragraph (a) of this section.

[71 FR 70283, Dec. 4, 2006, as amended at 72 FR 72571, Dec. 21, 2007]

§ 435.5 Performance level determination.

Each Federal agency shall determine energy consumption levels for both the baseline building and proposed building by using the Simulated Performance Alternative found in section 404 of the *ICC International Energy Conservation*

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Code, 2004 Supplement Edition, January 2005 (incorporated by reference, see § 435.3).

§ 435.6 Sustainable principles for siting, design and construction. [Reserved]

§ 435.7 Water used to achieve energy efficiency. [Reserved]

§ 435.8 Life-cycle costing.

Each Federal agency shall determine life-cycle cost-effectiveness by using the procedures set out in subpart A of 10 CFR part 436. A Federal agency may choose to use any of four methods, including lower life-cycle costs, positive net savings, savings-to-investment ratio that is estimated to be greater than one, and an adjusted internal rate of return that is estimated to be greater than the discount rate as listed in OMB Circular Number A-94 "Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs."

Subpart B—Voluntary Performance Standards for New Non-Federal Residential Buildings [Reserved]

Subpart C—Mandatory Energy Efficiency Standards for Federal Residential Buildings

§ 435.300 Purpose.

(a) This subpart establishes voluntary energy conservation performance standards for new residential buildings. The voluntary energy conservation performance standards are designed to achieve the maximum practicable improvements in energy efficiency and increases in the use of non-depletable sources of energy.

(b) Voluntary energy conservation performance standards prescribed under this subpart shall be developed solely as guidelines for the purpose of providing technical assistance for the design of energy conserving buildings, and shall be mandatory only for the Federal buildings for which design for construction began before January 3, 2007.

(c) The energy conservation performance standards will direct Federal policies and practices to ensure that cost-

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effective energy conservation features will be incorporated into the designs of all new Federal residential buildings for which design for construction began January 3, 2007.

[53 FR 32545, Aug. 25, 1988, as amended at 71 FR 70284, Dec. 4, 2006]

§ 435.301 Scope.

(a) The energy conservation performance standards in this subpart will apply to all Federal residential buildings for which design of construction began before January 3, 2007 except multifamily buildings more than three stories above grade.

(b) The primary types of buildings built by or for the Federal agencies, to which the energy conservation performance standards will apply, are:

- (1) Single-story single-family residences;
- (2) Split-level single-family residences;
- (3) Two-story single-family residences;
- (4) End-unit townhouses;
- (5) Middle-unit townhouses;
- (6) End-units in multifamily buildings (of three stories above grade or less);
- (7) Middle-units in multifamily buildings (of three stories above grade or less);
- (8) Single-section mobile homes; and
- (9) Multi-section mobile homes.

[53 FR 32545, Aug. 25, 1988, as amended at 71 FR 70284, Dec. 4, 2006]

§ 435.302 Definitions.

(a) *ANSI* means American National Standards Institute.

(b) *ASHRAE Handbook* means American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., *ASHRAE Handbook*, 1985 Fundamentals, Volume, 1-P Edition.

(c) *ASTM* means American Society of Testing and Measurement.

(d) *British thermal unit (Btu)* means approximately the amount of heat required to raise the temperature of one pound of water from 59 °F to 60 °F.

(e) *Building* means any new residential structure:

- (1) That includes or will include a heating or cooling system, or both, or a domestic hot water system, and